Development of light literacy module to measure functional literacy through regular census and household surveys

Context
Several initiatives are being taken by the UNESCO Institute for Statistics (UIS) and its partners to meet the needs for timely, reliable, comparable and sound literacy statistics at national and international levels.

At the forefront is the main survey of the Literacy Assessment and Monitoring Programme (LAMP), a cross-national and comparable literacy assessment. LAMP will bring in-depth information on the level and distribution of acquired functional literacy and numeracy skills of adults, as well as information on the link of these skills to key economic and social outcomes and to underlying determining factors. LAMP is intended to serve a range of policy needs including priority setting, resource allocation, programme design, advocacy, social marketing and programme evaluation. It is expected that countries will repeat the LAMP survey on a five to ten year interval in order to monitor trends in the performance of different groups in the population.

UIS is also developing several related LAMP products to complement the full-scale assessment, including a literacy questionnaire module, presented here.

This note intends to provide an overview of the Literacy Questionnaire Module Project, while an in-depth project document (concept paper) will discuss details as well as technical issues.

Objective
The literacy questionnaire module aims to provide a simple tool for collecting basic literacy data in a harmonised way, on a regular basis, interconnected with LAMP.

It was designed with two purposes in mind. First, it provides countries with a cost effective method to monitor literacy trends between large-scale LAMP assessments. Secondly, for countries with limited financial, technical and operational resources needed to undertake the full LAMP assessment, it provides a low cost tool for calibrating their national monitoring system to LAMP benchmarks (acknowledging though that the data quality will not be as high as in LAMP).

The module will also serve to introduce a consistent base of literacy indicators across a number of different survey instruments, allowing for analysis of how literacy varies with a range of characteristics collected in these existing surveys.

The instrument will feed into UIS recommendations (as the lead UN agency for education) to countries and to other UN agencies on how to measure literacy within existing survey instruments, including the next round of censuses.

Overall Approach
The instruments and data collection come in two parts. First there is the literacy questionnaire module itself, which consists of a set of about 10 questions, as described below, and which is to be attached onto existing surveys. This will provide information on characteristics known to underlie differences in literacy skills.
The second part is the calibration tool. This is based on the same literacy questionnaire module together with an actual assessment (test) of skills. It will serve to study the relationship between responses to the module and tested literacy skills. The calibration tool can be administered to a small sample of individuals, who are not necessarily included in the main survey onto which the module has been attached. However the calibration study will have to be carried out at roughly the same time as the main survey, that is, at most a few months apart. (The calibration tool is further detailed in the section on instruments.)

Together, the two parts of the study will help to benchmark the results of the literacy module to national estimates.

This approach will greatly improve upon literacy estimates that rely on a single question such as ‘are you literate?’. However, it will not provide literacy scores, nor information on their relationship to a more exhaustive set of characteristics as obtained in the dedicated full literacy assessment survey LAMP, nor will it bring in-depth information on component skills.

The module will also serve to introduce a consistent base of literacy indicators across a number of different survey instruments. This will allow for analysis of how literacy varies with various characteristics about which information is collected in these existing surveys, such as health, housing conditions, or poverty.

**Link with other literacy measures**

First the module is linked to LAMP. For the most part, the module is a subset of the LAMP background questionnaire, and the calibration tool will make it possible to analyse the relationship between assessed skills (LAMP) and the indicative picture provided by the module. It is the link with LAMP which will make it possible to fully validate the literacy questionnaire module approach, assess the accuracy of the results and assess the robustness of the method.

In each country, the questions currently used for collecting literacy data will also be included (provided they are only a few, as in most countries), allowing analysis of how the current measure compares with the literacy data collected through the module and the LAMP literacy scale.

The work is expected to lead to recommendations for censuses as well, and support harmonisation between future census literacy questions and key questions in the module, so as to enhance the information yield.

**Instruments**

The module will include about 10 questions on: self-declaration, use of skills, literacy environment, and languages. It will also include two simple test items. The purpose of these items is to serve as crude predictors of a lack of literacy skills, and it will also serve to introduce the know-how of item development, and to replenish the pool of LAMP items. It is important however to note that it will not be possible to evaluate literacy skills based on just two items.

The module will also gather data on a small number of key non-literacy variables that are related to literacy skills (unless these are already included in the country’s existing survey). This will include people’s educational background (literacy programmes and schooling), which is crucial for analysis in conjunction with literacy. A few variables such as possibly socio-economic status and parents’ education will also be included, as they are known to
explain the differences in literacy skills, and so will help build a suitable model for estimation (see section on calibration tool below).

Although no score can be derived from the literacy questionnaire module alone, it considers the understanding of literacy as a continuous concept, and this is reflected in the formulation of self-declaration questions.

In general, the module will collect information on literacy in all languages (or all written languages) spoken by the respondent. Thus it will provide answers to two major questions: (1) how many people (and who) have literacy skills (in any language), and (2) how many people (and who) have literacy skills in particular languages. The depth of information on these issues questions (e.g. in terms of providing information on the levels of skills) will depend on the languages in which the calibration study is conducted.

The calibration tool will contain the same ‘prose’ and ‘numeracy’ items as LAMP, to ensure comparability with results obtained from the full LAMP survey in other countries or in other years, and to minimise developmental costs (of constructing the items and of obtaining their statistical parameters). Since the aim of the calibration study is to quantify the relationship (between the literacy questions of the module and key variables with the tested skills), it will need to be administered only to a small purposive sample. Selecting a ‘purposive’ sample means that while still using a statistical sample, it is possible to ensure a good spread of the sample distribution of the key non-literacy variables, which is optimal for the study of relationships. Current thinking suggests that a sample of about 300 people should be sufficient and this will be confirmed following complete investigation.

The calibration tool is thus key to the project. Without it, the information collected through the literacy questionnaire module, while still improved compared with many current procedures, would be of limited value.

Instruction manuals will include advice on how to carry out implementation, i.e., how to translate and adapt instruments (module and calibration tool) into the desired target language(s), manage the appendage of the module in the existing survey, and conduct the calibration study. This includes how to administer the instruments in a prescribed way, score the responses, conduct the data processing, the coding, some validations, and the analysis.

Partners
The project is managed jointly by UNESCO Bangkok and the UNESCO Institute for Statistics, with financial assistance from the Japanese Government under the Funds-in-Trust Programme. Three countries in Asia will implement the project in the first year, each involving their National Statistics Office, concerned agencies and ministries. UNESCAP has offered to support the coordination with the national statistics offices. At the country level, the UNESCO field offices and other developmental partners will play a major role in coordination and monitoring of the project.
Outputs

- Comparable literacy data on the number of people who report that they can read and write at a certain level, who use their skills, and who were able to understand 2 written pieces of information.
- A report analysing the relationship between tested literacy skills and data collected through the literacy questionnaire module in each of the countries.
- A report analysing literacy data in connection with questions included in the main survey (e.g., demographics, education background).
- Inputs for international monitoring of Education for All and the Millennium Development Goals.
- Inputs for data needs of the Literacy Initiative for Empowerment (LIFE).
- A best-practice guide for collecting basic literacy data in a harmonised way, on a regular basis, in existing surveys, in linkage with LAMP.
- A tool for collecting comparable literacy data for multi-language countries where LAMP can be applied to only major languages.
- A set of literacy questions that have been thoroughly field tested and which can be included in question banks.
- Revised international guidelines and standards for including the topic of literacy in censuses and surveys.
- Best practice guide for collecting literacy data.
- A platform for countries to move onto LAMP, and built-in relationships with future LAMP results.

Outcomes

- Improved targeting of literacy policies and programmes.
- Improved understanding of the range of literacy problems in different populations.
- More inclusive and effective literacy policies tailored to the needs of particular groups/regions.
- Improved, and more effective, literacy curricula informed by data on the particular needs of specific populations/regions.
- Literacy programmes that are more likely to improve the economic and social circumstances of successful learners.
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